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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,493	10/15/2003	Osamu Takagi	016887-1099	3503

22428 7590 09/27/2005

FOLEY AND LARDNER  
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WASHINGTON, DC 20007

EXAMINER

LEUNG, PHILIP H

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/684,493

Applicant(s)

TAKAGI ET AL.

Examiner

Philip H. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-32 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The amendment filed 8-23-2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the change of the term “twisted wires” in the abstract and claim 28 to “twisted wire rods” is considered as new matter not supported in the original disclosure. Upon a review of the specification and original claims in the parent application Serial No. 09/852,770 (published as US 2002/0017519 A1) which is a divisional of and identical to the grandparent application, Serial No. 09/473,058, it is submitted that the term “twisted wire rods” is not the same as “twisted wires”. The original specification includes only the following passages with the terms “twisted”, “wire” and “rods”

[0040] Then, the induction heating device 6 will be described in detail. The device 6 comprises a core (coil supporting member) 20 of a heat resistant resin, such as a high heat resistant industrial plastic, and an exciting coil 21 wound onto the core 20. The exciting coil 21 allows alternating current to effectively pass through a litz wire. For example, the coil 21 is formed of a bundle of 19 unit wires, each of which is coated with a heat resistant polyamideimide and each of which has a diameter of 0.5 mm. As described above, the coil 21 is magnetically a so-called air-core coil which does not have a magnetic core, such as a ferrite or iron core, since the coil 21 is supported on the non-magnetic core 20. Thus, since it is not required to use any iron cores having a complicated shape, it is possible to reduce the costs, so that it is possible to provide an inexpensive magnetic circuit. Furthermore, in the figure, reference numbers 22a and 22b denote coil temperature sensors.

[0056] FIGS. 14(a) and 14(b) show examples of the insulation for the coil 21. That is, the coil 21 wound onto the core 20 has two end portions of a leading end portion 21(1) and a trailing end portion 21(2). FIG. 14(a) shows an example where the two end portions 21(1) and 21(b) are attached to each other in parallel, and FIG. 14(b) shows an example where the end portions are

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twisted. In general, since a high frequency current is supplied to the coil 21, it is not possible to avoid the generation of noises. However, since currents pass through the leading end portion 21(1) and trailing end portion 21(2) of the coil 21 in reverse directions to each other, electromagnetic influences are canceled out to inhibit the generation of noises by attaching the two end portions to each other. The examples shown in FIGS. 14(a) and 14(b) provide this effect. By attaching the two end portions to each other as shown in these figures, the generation of noises is inhibited.

Claims Text -

25. A fixing device using induction heating as set forth in claim 23, wherein said two outgoing lines are twisted.

Claims Text -

26. A fixing device using induction heating as set forth in claim 23, wherein said coil is formed of an insulating wire.

Claims Text -

27. A fixing device using induction heating as set forth in claim 23, wherein said coil is formed of a double insulating wire.

Therefore nowhere in the original disclosure including the specification, the abstract and the claims mentions the word "rods". It is submitted that an induction coil made of a bundle litz wires is not the same as "twisted wire rods". Applicant's statement "that the features recited in the pending claims are supported by the originally filed disclosure which includes the originally filed claims" is noted. However, it is submitted a general conclusive statement without pointing out exactly where the support can be found in the original disclosure has no merit.

Applicant is required to cancel the new matter in the reply to this Office Action.

The specification is further objected to as the limitation "double insulation wire" in claim 34 lacks support in the specification although it has support in the original claim 27. It is

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suggested that the specification be amended to provide a positive support. However, no new matter can be introduced;

Claims 28-32 and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As set forth above, the change of the term "twisted wires" in the abstract and claim 28 to "twisted wire rods" is new matter not supported in the original disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (571) 272-4782.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 472-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Philip H Leung  
Primary Examiner  
Art Unit 3742

P.Leung/pl  
9-15-2005